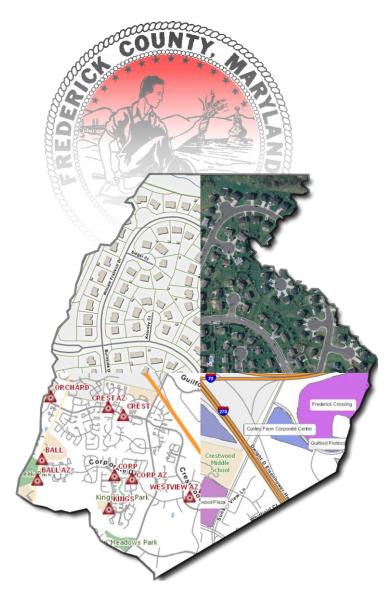
GEOGRAPHIC INFORMATION SYSTEMS STRATEGIC PLAN 2011 - 2015



FREDERICK COUNTY GOVERNMENT, MARYLAND

TABLE OF CONTENTS

1	. EXECUTIV	/E SUMMARY	1
	Purpose		1
	Goals		1
2	. BACKGRO	DUND	2
	2.1. GIS P	Program Mission Statement	2
	2.2. GIS P	Program History	2
3	. CURRENT	STATUS	3
	3.1. Organ	nization	3
	3.2. System	m Infrastructure	4
	3.3. Data I	Holdings	6
	3.4. GIS S	itakeholders	7
	3.5. Public	Access to Internet Mapping Applications and GIS Data	8
4	. OBJECTIV	/ES AND GOALS	9
	4.1. Mai	intain the High Quality of GIS Data and Services	9
	4.1.1.	Increase Accuracies of GIS Data Layers	9
	4.1.2.	Develop Tools and Workflows to Meet Stakeholder Needs	9
	4.1.3.	Acquire and Update GIS Data	10
	4.2. Dev	velop Partnerships and Collaborations for Regional Cost Reduction and Data Sharing	10
	4.2.1.	Increase Regional Partnerships	10
	4.2.2.	Outreach to Municipal Entities and Other Stakeholders	11
	4.3. Lev	verage GIS Program Efficiencies	11
	4.3.1.	Leverage GIS Consolidation for Increased Cost Effective Support of GIS Stakeholders.	11
	4.3.2.	Streamline Workflows	12
	4.3.3.	Increase Collaboration	12
	4.4. Exp	pand Access to Internet Mapping Services and Content	12
	4.4.1.	Increase Public Access and Usability of Web Mapping Services	12
	442	Develop Business-Oriented Web Applications	13

4.4.3.	Develop Mobile Applications	13
Appendix A:	Selected List of Downloadable GIS Base Data	14
Appendix B:	Selected Publicly Available GIS-Based Printed Maps	15
Appendix C:	Selected Mapping Applications	16
Appendix D:	Selected List of Current GIS Projects in Progress	20

1. EXECUTIVE SUMMARY

PURPOSE

This Geographic Information Systems (GIS) strategic plan establishes direction for Frederick County Government to deliver accurate and timely geographical information systems data to support informed decision making by government, businesses and citizens.

This Plan fosters a collaborative GIS environment to:

- Reduce the associated costs of maintaining and funding GIS data and related services.
- Improve efficiencies.
- Eliminate duplication of efforts.
- Expand diverse access to GIS mapping / services for the public and business sectors.

GOALS

MAINTAIN QUALITY GIS DATA AND SERVICES INCREASING GIS DATA ACCURACIES, DEVELOPING TOOLS AND WORKFLOWS, AND ACQUIRING NEW DATA RESOURCES

DEVELOP PARTNERSHIPS AND COLLABORATIONS TO ESTABLISH OPPORTUNITIES FOR REGIONAL COST REDUCTIONS AND DATA SHARING

LEVERAGE GIS PROGRAM EFFICIENCIES TO REDUCE COSTS; BENEFIT GIS STAKEHOLDERS; STREAMLINE WORKFLOWS AND ACHIEVE ENTERPRISE GIS OBJECTIVES

EXPAND ACCESS TO INTERNET MAPPING SERVICES AND CONTENT THROUGH WEB APPLICATIONS AND MOBILE TECHNOLOGIES FOR CITIZENS, BUSINESSES AND GOVERNMENT

2. BACKGROUND

2.1.GIS PROGRAM MISSION STATEMENT

FREDERICK COUNTY GEOGRAPHICAL INFORMATION SYSTEMS PROGRAM PROVIDES COST EFFECTIVE GIS RESOURCES THAT IMPROVE SERVICE DELIVERY TO FREDERICK COUNTY CITIZENS, BUSINESSES AND GOVERNMENT THROUGH LEVERAGED GEOSPATIAL TECHNOLOGIES.

2.2.GIS PROGRAM HISTORY

In 1994 the Frederick County GIS Program began with the acquisition of the GIS application InfoCAD to support survey activities and the digitizing of subdivision plats. As the importance of geospatial data grew, orthoimagery and other base map layers were acquired from the State of Maryland including hydrography, scanned parcel maps and the Maryland PropertyView property tax GIS database.

A 1998 GIS software assessment resulted in the procurement of the Environmental Systems Research Institute (ESRI) suite of GIS applications. The amount of spatial data resources and users increased within the program. Under the guidance of the GIS Steering Committee (representing divisional GIS stakeholders), dedicated funding and staffing supported a \$1.2 million spatial data acquisition, parcel database development project, orthoimagery, and planimetric datasets. An Enterprise GIS Office was established within the Interagency Information Technologies Division to coordinate and manage Countywide GIS initiatives. GIS data was maintained by the Planning, Public Works, and Emergency Services divisions within a decentralized staffing program structure.

In 2006, a GIS needs assessment recommended: expanded online spatial data resources, improved data sharing and coordination, elimination of duplication of effort, and centralized coordination and support. By 2008, the County had implemented recommendations that added online services, increased data layers, added GIS staff in the Interagency Information Technologies (IIT) division and started planning for enterprise GIS consolidation.

By 2012, the Frederick County GIS program continues to enhance services as recommended in the 2006 assessment. The GIS program consolidated in the IIT division in 2011 at a savings of approximately \$124,000 annually; GIS integration continues to expand within county services; GIS Internet mapping and data presence have been added along with improved desktop access to geospatial data and attending technologies and GIS is expanding mobile access.

3. CURRENT STATUS

3.1. ORGANIZATION

The current structure of the Frederick County GIS Program is based on a consolidation of GIS staff within the Interagency Information Technologies Division guided by a GIS Steering Committee.



3.2. SYSTEM INFRASTRUCTURE

Frederick County GIS continues to strengthen the enterprise system stability and reliability; upgrading infrastructure components to current software releases, developing and maintaining staff expertise in core Environmental Systems Research Institute (ESRI) application components and furthering proficiency in database management (SQL Server) systems and application development (.NET, Python, Flex, etc.) environments. All county GIS users will have access to the latest GIS software upgrades as they become available.

The system infrastructure is comprised of (1) production database server, (1) data recovery database server, (1) production web server, (1) development web server and (1) development database server. Frederick County's GIS program maintains (1) SQL Server instance and (4) ArcSDE databases for GIS data in the production environment.

Each ArcSDE database is associated with a specific role in the enterprise system. One database is designated for production and is read-only. Another is designated for editing of the core layers (Addresses, Parcels and Centerlines). One database is designated for all other editing (non-core layers) and the remaining database houses all raster imagery data. Each ArcSDE instance has a protected default version, SDE Default, which is the master version. Under the SDE Default version configuration, a business version of the data is created for all subsequent versions. From that version, all editing versions are generated and the SDE administrator reconciles and posts edits from the business version to the SDE Default.

Frederick County MD GIS System Architecture















Public/Residents Other Organizations

GIS Users







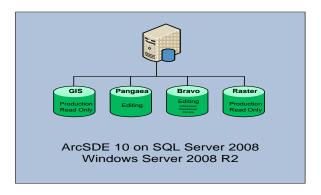


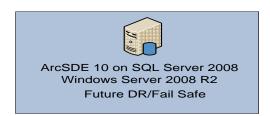
GIS Applications





GIS Servers







GIS Databases

3.3. DATA HOLDINGS

Frederick County GIS maintains 400 plus diversified spatial data sets. GIS staff produces, maintains supplies, analyzes, and incorporates a multitude of spatial and non-spatial data. To maintain an efficient and standardized enterprise GIS system, the data is maintained within the County's primary GIS ESRI software geo-spatial data formats.

The geospatial data holdings are composed of vector data (addresses, parcels, roadway centerlines, etc.) and image based raster data (full county aerial imagery both standard orthographic and oblique). Frederick County works closely with State and Federal agencies to obtain regular updates of orthographic imagery and with the private industry to obtain oblique image data.

Non-spatial data sets are frequently used as tabular or database formats in conjunction with geospatial data. Through the use of customized and standardized GIS applications, this data supports operations in emergency management, public works, public safety, planning, elections, and many other Frederick County Government business processes.

A partial listing of publicly available categorized geospatial data holdings:

http://www.frederickcountymd.gov/gis/pdf/PublicData_LayerInventory.pdf

5001					
we e					
Base Data					
	FILE INVENTORY				
					, Recreation, Schools, Transportation, Zipcodes, Zoning
ta Set	Shapefile		Data Creator:		Description:
ricultural Preservation	County_Held Critical Farms	9/23/2010			County-held Agricultural Preservation Properties
pricultural Preservation	Farms	9/23/2010			Properties in Critical Farm program Farm information from Frederick Farm Guide 2008
pricultural Preservation	FFP	9/23/2011	Enterprise GIS		Properties in Federal Farmland Protection Program
pricultural Preservation	IPP				
ricultural Preservation	ISTEA	9/23/2010		Planning	Properties in the Installment Purchase Program Inter-Surface Transcortation Enhancement Act Easements
ricultural Preservation	MALPF Districts	9/23/2010		Planning	Maryland Agricultural Land Preservation Districts
ricultural Preservation	MALPF_Districts MALPF Easements	9/23/2010		Planning	Maryland Agricultural Land Preservation Districts Maryland Agricultural Land Preservation Easements
gricultural Preservation	MFT Easements	9/23/2010			Maryland Agricultural Land Preservation Easements Maryland Environmental Protection Program Easements
pricultural Preservation	Rural_Legacy	9/23/2010			Maryland Environmental Protection Program Easements Maryland Rural Legacy Program Easements
omorehensive Plan	Community Facilities		Planning		Existing and Proposed Community Facilities
omprehensive Plan	Community Growth Boundaries		Planning		The extent municipalities may develop within 20-30 years
omprehensive Plan	Comprehensive Plan Designations		Planning		Where and what type of development may occur in 20-30yrs
omprehensive Plan	Highway Plan		Planning		Existing and Proposed Roads
ontrol	Control		Public Works	Public Works	Survey Control Monuments
mergency	Fire Stations		Enterprise GIS		Fire Station locations
mergency	Hospitals		Enterprise GIS		Hospital locations
mergency	Police Stations		Enterprise GIS		Police Station locations
lydrography	Catchment		Versar Inc.		DEM delineated drainage areas
lydrography	Catchment Clip		Enterprise GIS		Frederick County Cartographic Version of Catchments
lydrography	Dams				Water impoundment areas (dams)
lydrography	Feeder Streams		Versar Inc.		Streams from surrounding counties flowing into County
lydrography	Rivers Lakes		Public Works		Polygon surface water features
lydrography	Streams	9/12/2008	Enterprise GIS	Enterorise GIS	Linear surface water features (streams)
lydrography	Subwatershed		Versar Inc.	Public Works/Planning	Catchments dissolved into larger drainage areas
ydrography	Subwatershed Clip	3/21/2010	Enterprise GIS		Frederick County Cartographic Version of Subwatersheds
ydrography	Watershed	3/1/2008	Versar Inc.		Watershed boundaries for NPDES permit
ydrography	Watershed Clip	7/9/2008	Enterprise GIS		Frederick County Cartographic Version of Watersheds
idex Grids	Ortho Grid	1/1/2000		Enterprise GIS	Grid of Ortho Tiles in 2000 Frederick County Ortho
ndex Grids	Ortho_Grid_2005	1/10/2006	VARGIS, LLC	VARGIS, LLC	Grid of Ortho Tiles in 2005 Frederick County Ortho
dex Grids	Ortho_Grid_2007	4/30/2007	Axis GeoSpatial, LLC	Axis GeoSpatial, LLC	Grid of Ortho Tiles in 2007 Frederick County Ortho
idex Grids	Tax_Grid	1/1/2005	Planning	Planning	Tax Map Grid Index
dex Grids	Tax_Grid_Towns	1/1/2005	Planning		Tax Map Town Grid Index
dex Grids	Tax_Subgrid	1/1/2005	Planning	Planning	Tax Map Subgrid Index
and Cover	Forest	9/30/2004	Planning & Zoning	Planning & Zoning	Generalized forest areas
aroels	Parcels_Dist	Every Wed.		Enterprise GIS	Parcel boundaries
lanning & Zoning	PlanningRegions		Planning & Zoning	Planning & Zoning	Planning region boundaries
lanning & Zoning	Zoning	4/14/2010	Planning & Zoning	Planning & Zoning	Parcel based zoning

3.4.GIS STAKEHOLDERS

The Frederick County GIS stakeholder community includes internal and external governmental agencies, nonprofit groups, businesses and the general public. This stakeholder community has a variety of GIS data, application and service needs. Collaboration with this community provides effective regional GIS resource management and informed decision making.

FREDERICK COUNTY GOVERNMENT	INDEPENDENT AGENCIES	MUNICIPAL GOVERNMENT	STATE\FEDERAL GOVERNMENT	PUBLIC ACCESS
Board of County Commissioners	Board of Education	Brunswick	MD Department of the Environment	Internet Mapping Applications
Animal Control Division	Board of Elections	Burkittsville	MD Department of Planning	Data Downloads
Community Development Division	Department of Social Services	Emmitsburg	MD Emergency Management Agency	GIS-Based Digital & Hardcopy Maps
Division of Citizens Services	Frederick Community College	Frederick City	MD State Highway Administration	
Emergency Management Division	Liquor Commission	Middletown	Federal Emergency Management Agency	
Utilities / Solid Waste Management Division	Sheriff's Office	Mount Airy	Maryland State Geographic Information Committee	
Fire & Rescue Services Division	State's Attorney	Myersville	National Capital Region GIS Committee	
Health Services Division		New Market	Towson University Center for GIS	
Interagency Information Technologies		Rosemont		
Management Services Division		Thurmont		
Parks & Rec Division		Walkersville		
Public Works Division		Woodsboro		
Transit Services Division			-	
Finance Division				

3.5. PUBLIC ACCESS TO INTERNET MAPPING APPLICATIONS AND GIS DATA

Frederick County GIS Website

The Frederick County GIS Program supports public access to Internet mapping applications, such as, At-A-Glance and "no charge" GIS base data downloads via the Frederick County GIS website: http://www.frederickcountymd.gov/gis

Frederick County At-A-Glance Internet Mapping Application

Frederick County's At–A-Glance mapping application provides users a wealth of current information about Frederick County properties including; real property data, recycling collection schedules, crime statistics, zoning, water and sewer services, nearby schools and libraries, police districts, and recreational parks. Also accessible to map users is an archive of historical aerial imagery of the county ranging from 1952-2009, mapping tools (measure, zoom, annotation, etc.), links to Google Street View, local weather forecasts and many other types of valuable information.

Internet Mapping Applications and Services

http://www.frederickcountymd.gov/gis/mapServices/home.html

Internet mapping applications and services have been developed using ArcIMS (Internet Map Server) and ArcGIS server technologies offering a faster and more user-friendly Web mapping public experience.

The following map services are accessible using varied GIS software:

Base Map, Business Parks and Retail Centers, Fire Station Service Areas, Orthophotography, Traffic Counts, Water and Sewer and Zoning.

Downloadable GIS Data

https://www.frederickcountymd.gov/gisdatazip/

GIS base data, including Orthophotography and contour-planimetric data, are available for direct public download for use within GIS software.

Reference a detailed list of available data layers within Appendix A.

Printed GIS-Based Maps

http://www.frederickcountymd.gov/gis/mapPrints/home.html

GIS data-based maps are available in several document sizes as a free website download in PDF file formats. Maps may also be printed upon request for a printing charge.

Reference a detailed list of available data layers within Appendix B.

4. OBJECTIVES AND GOALS

4.1. MAINTAIN THE HIGH QUALITY OF GIS DATA AND SERVICES

4.1.1. INCREASE ACCURACIES OF GIS DATA LAYERS

Identify GIS data layers that require higher accuracies for application development and stakeholder use and formulate a plan to achieve those accuracies as the continued support and funding of BOCC will provide.

Goals

- Update Water & Sewer Lines and Structures Data (Including Existing and Proposed Service)
- Improve Parcel Data (Provide Increased Parcel Data Accuracy Correction Workflows)
- Improve Address Data (Provide Increased Address Accuracy Through Multiple Data Sources)

4.1.2. DEVELOP TOOLS AND WORKFLOWS TO MEET STAKEHOLDER NEEDS

Improve production of application tools and workflows based on the fulfillment of GIS stakeholder needs for state and federal mandates and the improvement of business processes.

Goals

- Map Sexual Offenders and Crime Information (Conversion to the FLEX Application Increasing Public Usability and Access)
- Migrate PlanBase Application from the ArcReader to ArcExplorer GIS Data Viewer
 (Provision of Higher Quality Accessibility to Hundreds of CDD Required Data Layers)
- Standardize Metadata Workflow (Spatial Data) (Increase the Usability of Frederick County GIS Data through Spatial Information Documentation)

4.1.3. ACQUIRE AND UPDATE GIS DATA

Acquire new GIS data resources and update existing data holdings through collaborative and available funding opportunities.

Goals

- Update Hydrography GIS Database (Update and Improve the Stream, River and Lake Spatial Database)
- Repair and Densify Survey Control Monument Network (Supporting County Division Operations and the Development and Survey Communities)
- Update Planimetric Data (Supporting Base Map Layer Needs and the Maryland State Mandated NPDES Permit)

4.2.DEVELOP PARTNERSHIPS AND COLLABORATIONS FOR REGIONAL COST REDUCTION AND DATA SHARING

4.2.1. INCREASE REGIONAL PARTNERSHIPS

Identify and pursue local and regional GIS partnerships expanding Frederick County's involvement in collaborative and cost sharing GIS programs and data acquisition (public safety, mutual aid, aerial imagery contracting, etc.).

Goals

- Assists with Municipal Comprehensive Plan (Provide Collaborative GIS Support for Planning Activities)
- Develop EOC / Emergency Use Web Applications (Web-Based Common Operating Picture and Emergency Operations Analysis Tool)
- Partner with NCR GDX (National Capital Region Geospatial Data Exchange)
- Provide GIS Data to Support PSIC (Public Safety Interoperable Communications Grant Program)

4.2.2. OUTREACH TO MUNICIPAL ENTITIES AND OTHER STAKEHOLDERS

Engage municipalities, GIS stakeholders and non-GIS entities, increasing spatial data support and usage. Provide additional outreach, by means of GIS services, training (when applicable) and data usage for internal users.

<u>Goals</u>

- Initiate a Frederick County GIS User Group (Providing Outreach and Support to Internal and External GIS Stakeholders)
- Outreach to the Frederick County Public School System

4.3.LEVERAGE GIS PROGRAM EFFICIENCIES

4.3.1. LEVERAGE GIS CONSOLIDATION FOR INCREASED COST EFFECTIVE SUPPORT OF GIS STAKEHOLDERS

Utilize the recent consolidation of GIS staff to structure GIS support and services focused on the unique needs of Frederick County Government divisions and agencies.

<u>Goals</u>

- Support Transportation Planning GIS (Increased Support for Transportation Planning and Modeling)
- Modify 2005 Impervious Surface Layer Data (Supporting the Mandated NPDES MS4 Permit)
- Support Comprehensive Planning and Zoning (Increased Support for Land Use Plan, Community Facilities Plan and Master Highway Plan Development)
- Develop Emergency Communication First Due Routes in Network Analyst Format (Provide Regional Fire Station Due Orders within a Geospatial Format)

4.3.2. STREAMLINE WORKFLOWS

Evaluate and improve, where possible, existing GIS support and services workflows and produce new processes for increased program efficiencies.

Goals

- Migrate CDD Databases (Streamline Community Development Division Spatial Data Use Workflows)
- Develop GIS Gateway Application (GIS Resource Portal Development for Desktop Users)
- Enhance Roadway Image Viewer (Conversion of Several Versions of this Application to the FLEX Environment)

4.3.3. INCREASE COLLABORATION

Investigate collaborative activities aimed at improving program efficiencies through cost savings and staff resourcing and training with the goal of improved support for GIS data consumers.

Goals

- Incorporate TransIT Bus Stops and Routes to At-A-Glance (Addition of Bus Stops and Route Information to Mapping Service)
- Enhance Extranet: Road Closure Application (Provide Outreach to Internal Users and Develop Additional Security Refinements to Broaden Usability)

4.4.EXPAND ACCESS TO INTERNET MAPPING SERVICES AND CONTENT

4.4.1. INCREASE PUBLIC ACCESS AND USABILITY OF WEB MAPPING SERVICES

Improve the user experience of current Web mapping applications through increased mapping features and content for the general public.

<u>Goals</u>

- Enhance Frederick County Internet Map Service (Convert this Public Map Service to the FLEX Application Environment Providing Enhanced Usability)
- Create Community Development At-A-Glance (Development of a Community Development Division Themed At-A-Glance Map Service)

4.4.2. DEVELOP BUSINESS-ORIENTED WEB APPLICATIONS

Design and develop additional commerce content Web applications in support of Frederick County business development activities.

Goals

Integrate OED Web Application Into At-A-Glance Adobe Flex (Conversion of the Office of Economic Development Map Service to the FLEX Application Environment Providing Increased Business Community GIS Data Access)

4.4.3. DEVELOP MOBILE APPLICATIONS

Research the feasibility and deployment of mobile applications for increased public access to Frederick County's GIS resources in keeping with mobile computing trends.

Goals

Prepare Existing Map Applications for Mobile Device Use (Adjust Current Mapping Applications for Future Mobile Device Access and Usability)

APPENDIX A: SELECTED LIST OF DOWNLOADABLE GIS BASE DATA

Data Download Website: https://www.frederickcountymd.gov/gisdatazip/

- Agricultural Preservation
- Comprehensive Plan
- Control
- Emergency
- Hydrography
- Index Grids
- Land Cover
- Parcels
- Planning and Zoning
- Points of Interest
- Political Features
- Recreation
- Schools
- Transportation
- Water and Sewer
- Zip Codes

APPENDIX B: SELECTED PUBLICLY AVAILABLE GIS-BASED PRINTED MAPS

MAP TITLE	PDF DOCUMENT SIZE	COST
Agricultural Preservation Areas	(8.5 x 11); (34 x 44)	\$1; \$20
Base Map	(8.5 x 11); (34 x 44)	\$1; \$20
Bikeways and Trails Plan	(8.5 x 11); (34 x 44)	\$1; \$20
Census Tracts of 2000	(8.5 x 11); (34 x 44)	\$1; \$20
Comprehensive Land Use Plan	(8.5 x 11); (34 x 44)	\$1; \$20
Comprehensive Land Use Plan with Tax Grid	(8.5 x 11); (34 x 44)	\$1; \$20
General Plan	(8.5 x 11); (34 x 44)	\$1; \$20
Historic Properties	(8.5 x 11); (34 x 44)	\$1; \$20
Landform Map	(8.5 x 11) ; (34 x 44)	\$1; \$20
Legislative Sub-districts, Districts, Precincts and Polling Places	(8.5 x 11); (34 x 44)	\$1; \$20
Parks and Recreation	(8.5 x 11); (34 x 44)	\$1; \$20
Planning Regions	(8.5 x 11); (34 x 44)	\$1; \$20
Planning Regions with Tax Map Grid	(8.5 x 11); (34 x 44)	\$1; \$20
Priority Funding Areas	(8.5 x 11); (34 x 44)	\$1; \$20
Recycle Cart Pick-up Dates	(8.5 x 11); (34 x 44)	\$1; \$20
Sewer Service Areas	(8.5 x 11); (34 x 44)	\$1; \$20
Water Service Areas	(8.5 x 11); (34 x 44)	\$1; \$20
Watersheds	(8.5 x 11); (34 x 44)	\$1; \$20
Wellhead Protection Areas	(8.5 x 11); (34 x 44)	\$1; \$20
Zip Codes	(8.5 x 11); (34 x 44)	\$1; \$20
Zoning	(8.5 x 11); (34 x 44)	\$1; \$20
Zoning with Tax Map Grid	(8.5 x 11); (34 x 44)	\$1; \$20



FREDERICK COUNTY AT-A-GLANCE (ARCGIS SERVER, FLEX API)

http://webmaps.frederickcountymd.gov/AtAGlance

The Frederick County At–A-Glance application allows users to obtain a wealth of current information about Frederick County properties including real property information, plat, recycle data, crime statistics, zoning, water and sewer services, schools, libraries, police districts, and parks.



SURVEY CONTROL NETWORK MAPPING APPLICATION (ARCGIS SERVER, FLEX API)

http://webmaps.frederickcountymd.gov/surveycontrol/index.html

The Survey Control Network mapping application provides locations and information of survey control monuments maintained by Frederick County Government. This application has a variety of tools to measure and locate survey monumentation data in support of the survey and development communities.



ADDRESS AND STREET SEARCH APPLICATION (ARCGIS SERVER, FLEX API)

http://webmaps.frederickcountymd.gov/StreetSearch/

After searching for a street or address, the application provides a table indicating all possible matches to the search query. An interactive map will zoom to the location. Users are also able to report an error if they find an address with incorrect information.



FREDERICK COUNTY OFFICE OF ECONOMIC DEVELOPMENT BUSINESS PARKS AND RETAIL CENTERS MAPPING APPLICATION (ARCGIS SERVER, WEB ADF)

http://www.frederickcountymd.gov/gis/mapServices/agreement O ED.html

Users can search Business Park and Retail Center information in Frederick County including property management contacts, square footage, zoning and other vital commerce information.



FREDERICK COUNTY INTERNET MAP SERVICE (ARCIMS)

http://www.frederickcountymd.gov/gis/mapServices/agreement_basic.html

The base map layers in this application include; municipal boundaries, police stations, schools, libraries, rivers and lakes, election districts, roads, orthophotography imagery taken in year 2007, GIS layer reference grids and more.



ELECTION DISTRICTS AND PRECINCTS IN FREDERICK COUNTY, MD (ARCIMS)

 $\underline{\text{http://www.frederickcountymd.gov/gis/mapServices/agreement_el}}$ ection.html

Users can find their election precinct and download a precinct map using this service.



FREDERICK COUNTY SHERIFF'S OFFICE SEXUAL OFFENDERS MAP SERVICE (ARCIMS)

 $\underline{\text{http://www.frederickcountymd.gov/gis/mapServices/agreement_rs}}\\ \underline{\text{o.html}}$

This map service contains information on Registered Sexual Offenders provided to the Sheriff's Office by the registrant and is based upon the last notification received.



FREDERICK COUNTY SHERIFF'S OFFICE CRIME MAPPING

http://www.frederickcountymd.gov/gis/mapServices/agreement_cri memap.html

The map layers include selected offense reports taken by the Frederick County Sheriff's Office, the Brunswick Police Department and the Thurmont Police Department. It does NOT include any reports taken by the Frederick City Police Department or the Maryland State Police.



BOARD OF COUNTY COMMISSIONERS MAP SERVICE (ARCIMS, INTERNAL USE)

 $\underline{\text{http://www.frederickcountymd.gov/gis/mapServices/agreement bo}} \\ \text{cc.html}$

This map service provides GIS base layers, tax maps and ortho imagery as an internal application for the Frederick County Board of County Commissioners.



FREDERICK COUNTY ROADWAY IMAGE VIEWER (ARCIMS, INTERNAL USE)

 $\underline{\text{http://www.frederickcountymd.gov/gis/mapServices/agreement_ro}} \\ \text{adwayImagery.html}$

This is an internal image viewer allowing Frederick County staff to "drive" county roadways from their desktop. Also used by the Sheriff's Office and Board of Education, this application provides a safe means of roadway setting investigation and a cost savings in fuel and staff hours.



FREDERICK COUNTY SNOW ROUTES MAPPING APPLICATION (ARCIMS, INTERNAL USE)

http://www.frederickcountymd.gov/gis/mapServices/agreement_sn_owroutes.html

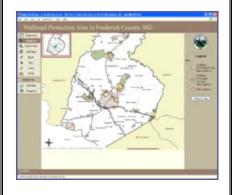
Countywide snow routes, priority roads, satellite facilities and school bus turnaround location layers are available within this application as well as accessible PDF maps for planning and operations.



FREDERICK COUNTY INFRASTRUCTURE (ARCIMS, INTERNAL USE)

http://www.frederickcountymd.gov/gis/mapServices/agreement_infrastructure.html

County owned buildings, County leased buildings, and Voice Services Sites are available in this mapping application.



WELLHEAD PROTECTION AREA IN FREDERICK COUNTY, MD (ARCIMS, INTERNAL USE)

 $\underline{\text{http://www.frederickcountymd.gov/gis/mapServices/agreement } \underline{\text{wh}}}\\ \underline{\text{p.html}}$

Wellhead Protection sites inside and outside municipalities are shown. Users can search the map by address or property information.

APPENDIX D: SELECTED LIST OF CURRENT GIS PROJECTS IN PROGRESS

GIS PROJECT	DESCRIPTION
Municipal Comprehensive Plan	Provide collaborative GIS support for planning activities.
NCR GDX (National Capital Region Geospatial Data Exchange)	Regional data exchange partnership.
Transportation Planning GIS	Increased support for transportation planning.
Modify 2005 Impervious Surface Layer Data	Support for the mandated NPDES MS4 Permit.
Comprehensive Planning and Zoning	Increased support for the Land Use Plan, Community Facilities Plan and Master Highway Plan.
Emergency Communication First Due Routes Developed in Network Analyst Format	Provide regional fire station due orders within a geospatial format.
GIS Gateway Application	GIS resource portal development for desktop users.
TransIT Bus Stops and Routes to At-A-Glance	Addition of bus stops and route information to the mapping service.
Extranet: Road Closure Application	Provide outreach to internal users and develop additional security refinements to broaden usability.
Frederick County Internet Map Service	Convert this public map service to the FLEX application development environment providing enhanced usability.
Agile Assets Pavement Management Application GIS Support	GIS support of pavement management application under implementation by the Division of Public Works.
Analysis in Support of Cost Analysis for Draft NPDES MS4 Permit	GIS support of cost analysis for draft NPDES MS4 Permit.
Sign Inventory Application (Roadway Assets Management)	GIS support for roadway signage inventory and maintenance.
Emergency Notification System (Everbridge)	Continued maintenance support and quarterly data updates.
Parcel Data Improvement	Identify correct and create parcels improvement work-flow.
Address Data Improvement	DFRS address verification in the field.